

CLAIMS

What is claimed is:

- 1 1. An apparatus, comprising:
2 an integrated frequency hopping/GPS receiver that receives a
3 downconversion signal from a frequency synthesizer, said frequency synthesizer
4 having a phase lock loop with an operative frequency range that is less than the
5 difference between an ISM band frequency and a GSM carrier frequency.
- 1 2. The apparatus of claim 1 wherein said wireless receiver further comprises
2 an RF module having an off chip amplifier and an on chip amplifier for GPS
3 signal processing path, said RF module having an on chip amplifier for said
4 frequency hopping signal processing path.
- 1 3. The apparatus of claim 1 wherein said wireless receiver further comprises
2 an IF module having an IF filter, said IF filter having a first bandwidth for said
3 GPS signal processing path and a second bandwidth for said frequency hopping
4 signal path.
- 1 4. The apparatus of claim 1 wherein said wireless receiver further comprises
2 a digitizing module having an IQ combiner for said GPS signal processing path
3 and an FSK demodulator for said frequency hopping signal path.
- 1 5. An apparatus, comprising:

2 an RF module within a wireless receiver, said RF module having an off
 3 chip amplifier and an on chip amplifier for a GPS signal processing path, said RF
 4 module having an on chip amplifier for a frequency hopping signal processing
 5 path.

1 6. An apparatus, comprising:
 2 an IF module within a wireless receiver, said IF module having an IF filter,
 3 said IF filter having a first bandwidth for a GPS signal processing path and a
 4 second bandwidth for a frequency hopping signal path.

1 7. An apparatus, comprising:
 2 a digitizing module within a wireless receiver, said digitizing module
 3 having an IQ combiner for a GPS signal processing path and an FSK
 4 demodulator for a frequency hopping signal path.

1 8. An apparatus, comprising:
 2 a frequency synthesizer having a phase lock loop with an operative
 3 frequency range that is less than the difference between an ISM band frequency
 4 and a GSM carrier frequency, said phase lock having a feedback coupled to a
 5 sigma delta modulator, said sigma delta modulator configured to receive a
 6 control word for receiving a frequency hopping channel or a control word for
 7 receiving a GPS signal.

1 9. An apparatus, comprising:

2 a wireless receiver having a GPS signal processing path and a frequency
3 hopping signal path, said wireless receiver having a control input that enables
4 said GPS signal processing path or said frequency hopping signal processing
5 path.

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